ABSTRACT

An automatic compensating valve, e.g., for individual shower and tub/shower combination fixtures, has a valve body defining cold and hot water inlet flow passageways, a mixing chamber, a mixed temperate water outlet flow passageway, and an axial bore. The valve includes a plunger that defines, with other elements of the valve, a first orifice for communication of the cold water inlet with said mixing chamber and a second orifice for communication of hot water inlet with mixing chamber. The plunger is mounted within a mixing subassembly for axial movement within the bore, including in response to temperature of water within the mixing chamber to vary the ratio of flow of cold water through the first orifice to flow of hot water through the second orifice. The first orifice and the second orifice are arranged for flow of water transverse to axial movement of the plunger within the bore. The valve further includes a wax motor mounted axially within the bore for positioning of the plunger in response to temperature of water within the mixing chamber.